

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,270	10/16/2003	John Gavin MacDonald	18,971	9987
23556 7590 10/04/2005			EXAMINER	
	CLARK WORLDW	NASSER, ROBERT L		
401 NORTH LAKE STREET NEENAH, WI 54956			ART UNIT	PAPER NUMBER
,			3736	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	I A	I Am P				
	Application No.	Applicant(s)				
Office Action Comments	10/687,270	MACDONALD ET AL.				
Office Action Summary	Examiner	Art Unit				
	Robert L. Nasser	3736				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING. Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory provided to reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a r n. eriod will apply and will expire SIX (6) MON statute, cause the application to become AB	CATION. eply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on g	Responsive to communication(s) filed on <u>02 June 2005</u> .					
2a)⊠ This action is FINAL . 2b)□	This action is FINAL . 2b) This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is.					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		•				
4) ⊠ Claim(s) 23-49 is/are pending in the application 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 23-49 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction a	ndrawn from consideration.					
Application Papers		•				
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the continuous The oath or declaration is objected to by the	accepted or b) objected to the drawing(s) be held in abeyar orrection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892)	•	Summary (PTO-413)				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date 	· · · · · · · · · · · · · · · · · · ·	s)/Mail Date nformal Patent Application (PTO-152) 				

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-24, 29-37, 39, 46, 47, and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by MacDonald 2003/0203009. While Macdonald is not available under 35 U.S.C. 103c, it still qualifies as a reference under 35 U.S.C. 102(e).

The applied reference has a common inventor/assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In paragraph [0038], MacDonald teaches a breath indicator including a cellulose (fiber) wipe that has a coating of nanoparticles and a color change indicator, responsive to sulfur containing odorous substances in the breath. The substrate is placed in a straw and the user blows on the substrate, which changes color in the presence of

Art Unit: 3736

sulfur compounds. The nanoparticles of Macdonald have a size from 1-1000 nm (paragraph [0023] and have a surface area in the claimed range (see claims 2-4).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 3

Claims 24-26, 29-43, 46-48, and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Berry 3507269 in view of Cha et al 2003/008237. Berry shows a device for indicating bad breath that has several color change elements, one being sensitive to sulfur containing compounds (see column 2, lines 55-56) and one to amine containing compounds (see column 3, line 38). The device does not have nanoparticles in the indicator. Cha further teaches a color change indicator made from nanoparticles (see paragraph 80). From this teaching, it would have been obvious to modify the above combination to use such a color change material, as it is merely the substitution of one known indicator for another. Claims 29 and 30 are rejected in that the nanoparticles of Cha are 1-100 nm. With respect to claims 31 and 32, the exact surface area is not stated to be for a particular purpose or to solve a stated problem. As such, the exact surface area would have been a mere matter of design choice for one skilled in the art. Claim 33 is rejected in that the nanoparticles of Cha are silica. Claims 34-36 are rejected in that the substrate of Berry is filter paper (see column 2, lines 32-33) which is cellulose. Claims 37-38 and 46-48 are rejected in that applicant has not stated that the

form of the indicator solves a stated problem or that it is for a particular purpose. As such, the exact form of the indicator would have been a mere matter of design choice for one skilled in the art, as all forms of the indicator appear to function equally as well. With respect to claim 39, the claim is a product by process claim. As such, the prior art need only provide teach the identical structure, regardless of how it was made (See MPEP 2113). With respect to claim 39, the combination has an indicator on a substrate, which is applied to the substrate in solution. Hence, it anticipates the claim. With respect to claims 40 and 41, the exact indicator concentration is not stated to be for a particular purpose or to solve a stated problem. As such, the concentration would have been a mere matter of design choice for one skilled in the art. With respect to claim 42, Berry teaches using a suitable color chart to identify the degree of color change (see column 3, lines 65-68). With respect to claim 49, Berry teaches the method.

Claims 23, 24, 29-34, 37-41, and 46-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Rodriquez-Fernandez et al 2001/0056246 in view of Cha.

Rodriquez-Fernandez shows a breath testing device with a visual indicating agent 4 that is sensitive to at least one odor in the breath and changes color in response to the odor. It does not have nanoparticles. Cha further teaches a color change indicator made from nanoparticles (see paragraph 80). From this teaching, it would have been obvious to modify the Rodriquez-Fernandez to use such a color change material, as it is merely the substitution of one known indicator for another. With respect to claim 24, element 4 is sensitive to hydrogen sulfide, which is a sulfur containing compound. Claims 29 and 30

are rejected in that the nanoparticles of Cha are 1-100 nm. With respect to claims 31 and 32, the exact surface area is not stated to be for a particular purpose or to solve a stated problem. As such, the exact surface area would have been a mere matter of design choice for one skilled in the art. Claim 33 is rejected in that the nanoparticles of Cha are silica. Claim 34 is rejected in that the substrate of Berry is filter paper (see column 2, lines 32-33) which is cellulose. Claims 37 and 46-47 are rejected in that the substrate is at an end of tube 1. With respect to claims 38 and 48, applicant has not stated that the shape of the carrier solves a stated problem or that it is for a particular purpose. As such, the exact shape of the carrier would have been a mere matter of design choice for one skilled in the art, as all shapes of the carrier appear to function equally as well. With respect to claim 39, the claim is a product by process claim. As such, the prior art need only provide teach the identical structure, regardless of how it was made (See MPEP 2113). With respect to claim 39, the combination has an indicator dried on a substrate. . Hence, it anticipates the claim. With respect to claims 40 and 41, the exact indicator concentration is not stated to be for a particular purpose or to solve a stated problem. With respect to claim 19; Rodriguez-Fernandez teaches the claim method

Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriquez-Fernandez et al in view of Cha, as applied to claims 23, 24, 29-34, 37-41, and 46-49 above, further in view of Hoshino 3615478. Hoshino further teaches the michler's hydrol undergoes a color change in response to sulfur containing substances (see abstract and column 4, line 32 in combination). Hence, it would have been obvious

to modify Rodriquez-Fernandez to use michler's hydrol, as it is merely the substitution of one known color indicator for another.

Claim 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry et al in view of Cha, as applied to claims 23-25, 29-43, 46-48, and 49 above, further in view of Hoshino 3615478. Hoshino further teaches the michler's hydrol undergoes a color change in response to sulfur containing substances (see abstract and column 4, line 32 in combination). Hence, it would have been obvious to modify Berry to use michler's hydrol, as it is merely the substitution of one known color indicator for another.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berry et al in view of Cha, as applied to claims 24-26, 29-43, 46-48, and 49 above, further in view of Springer et al 2003/0130631. Springer further teaches that alphanaphthobenzein is a known color change substance. Hence, it would have been obvious to modify Berry to use such a substance, as it is merely the substitution of one known color indicator for another.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriquez-Fernandez et al in view of Cha, as applied to claims 23, 24, 29-34, 37-41, and 46-49 above, further in view of Springer et al 2003/0130631. Springer further teaches that alpha-naphthobenzein is a known color change substance. Hence, it would have been obvious to modify the above combination to use such a substance, as it is merely the substitution of one known color indicator for another.

Art Unit: 3736

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriquez-Fernandez et al in view of Cha, as applied to claims 23, 24, 29-34, 37-41, and 46-49 above, further in view of Berry 3507269. Berry teaches using a suitable color chart to identify the degree of color change (see column 3, lines 65-68). Such an arrangement enables an easier determination of the degree of color change. Hence, it would have been obvious to modify Rodriquez-Fernandez to use such a color chart, to simplify the determination of color change.

Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry in view of Cha, as applied to claims as applied to claims 23-25, 29-43, 46-48, and 49 above, further in view of Pedersen 6607711 and Withers et al 5,245,117. Pedersen teaches in the background paragraphs 64 and 70 and in the description at paragraph 89, for example, teach using a halimeter (bad breath tester) to determine the effects of a breath freshener. Therefore, it would have been obvious to modify Berry to use its device to test how well a freshener works, as it is merely the use of the device for a known method. The combination does not have a dispenser, e.g. container, containing the testing device and the breath freshener. Withers et al teaches a diabetes kit which includes both a glucose testing device and an insulin supply. As such, it has a testing means and a treating means in the same device to provide ease of treatment for the user. The Federal Circuit has established that a reference is good for all it teaches. When applied here, Withers teaches modifying the above combination to use a single container, to simplify the treatment process.

Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriquez-Fernandez et al in view of Cha, as applied to claims 23, 24, 29-34, 37-41, and 46-49 above, further in view of Pedersen 6607711 and Withers et al 5,245,117. Pedersen teaches in the background paragraphs 64 and 70 and in the description at paragraph 89, for example, teach using a halimeter (bad breath tester) to determine the effects of a breath freshener. Therefore, it would have been obvious to modify Berry to use its device to test how well a freshener works, as it is merely the use of the device for a known method. The combination does not have a dispenser, e.g. container, containing the testing device and the breath freshener. Withers et al teaches a diabetes kit which includes both a glucose testing device and an insulin supply. As such, it has a testing means and a treating means in the same device to provide ease of treatment for the user. The Federal Circuit has established that a reference is good for all it teaches. When applied here, Withers teaches modifying the above combination to use a single container, to simplify the treatment process.

Applicant's arguments filed 6/2/2005 have been considered, but are not deemed to be persuasive.

Applicant has asserted that there is no suggestion to combine Cha with either Rodriquez-Fernandez or Berry. The examiner disagrees. Both references teach a color change indicator that changes color in the presence of odor containing substances. Cha teaches a different kind of color change indicator that uses nanoparticles. As such, the indicators in both cases perform similar or equivalent functions. Absent a showing of unexpected results or incompatability, it would be a

simple substitution for one skilled in the art to substitute one known indictor for an indicator that performs an equivalent function.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is (571) 272-4731. The examiner can normally be reached on Mon-Fri, variable hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/687,270

Art Unit: 3736

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert L. Nasser Primary Examiner Art Unit 3736 Page 10

RLN September 30, 2005

> ROBERT L. NASSER PRIMARY EJAMINER

Robet & Massel